



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,179	01/16/2007	Atsushi Maeda	289402US2PCT	6734
22850 7590 06/22/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
LEE, DOUGLAS S				
ART UNIT		PAPER NUMBER		
2121				
NOTIFICATION DATE		DELIVERY MODE		
06/22/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/575,179

Applicant(s)

MAEDA, ATSUSHI

Examiner

DOUGLAS S. LEE

Art Unit

2121

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 12/16/2008

DETAILED ACTION

1. The indicated allowability of claims 1-10 are withdrawn in view of the newly discovered reference(s) to Zaharia et al. (US Pat. #5,708,416) incorporated by Zaharia (US Pat. #5,186,300). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 6, and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Zaharia et al. (US Pat. #5,708,416) incorporated by Zaharia (US Pat. #5,186,300).

Regarding claim 1, Zaharia et al. teach a display apparatus for a conveyor comprising: a plurality of safety devices disposed on a conveyor (*Zaharia et al*, *fig.5 safety devices 20A's and 20B's*); a display configured to indicate information relating to operational conditions of the conveyor or positions of a malfunctioned safety device (*Zaharia et al*, *fig.4 display 70, col.4 lines 41-46 "display condition information ...when the corresponding safety device is activated."*); a display controller (*Zaharia et al*, *decoder unit 52, col.4 lines 7-15 & 16-25*) configured to specify the operation condition of the conveyor or the actuated safety device, and providing the information to the display (*col.4 lines 41-46*) .

Zaharia et al. teaches removing power to stop the conveyor (col.4 lines 15-25) but does not disclose a contactor for controlling a motor direction and a safety device detector to remove power from the contactor. This control circuitry is conventional in the conveyor art. Zaharia discloses a safety circuitry for stopping/starting a conveyor

*comprising: a contactor (Zaharia, fig.1 relay 14 & 16) for intermittently charging to a motor driving circuit of the conveyor, or changing running operation between normal and reverse running directions (Zaharia, col.2 lines 45-50, up or down); a safety device detector (Zaharia,, fig.1 safety chain relay contact 20) configured to be capable of shutting down a power source of the contactor, when any of the safety devices is actuated (Zaharia, col.1 lines 29-31, "when a safety device operates, it opens the safety circuit or chain, which in turn stops the escalator or moving walk way." Col.3 lines 7-10 "...if a safety condition occurs, the safety contact 20 will open in an attempt to **deenergize the up or down relay 14 or 16, by removing voltage from a line 38,...**"). Since Zaharia et al. incorporated by reference Zaharia, Zaharia et al. fully anticipated claim 1.*

Regarding claim 2, it recites identical limitations as that of claim 1 with the addition of a binary signal means configured to generate a binary signal which specifies the operation condition of the conveyor or the actuated safety device. Zaharia et al. teaches claim 1 as stated above. Zaharia teaches a binary signal means (*col.3 lines 29-34 encoder transmitter 30*) configured to generate binary signal (*col.3 lines 29-34 digitized trigger signal packet*) which specifies the actuated safety device (*col.3 lines 35-43 "... the packet includes... a safety device ID"*). Zaharia et al. therefore fully anticipated claim 2.

Regarding claim 3, it recites an identical limitation as that of claim 2 with the addition of the binary signal means includes a controller for outputting to the display controller the binary signals specifying the position of actuated safety device based on potentials of

the respective safety devices. Zaharia et al. teaches claim 2 as stated above. Zaharia teaches a binary signal means (*col.3 lines 29-34 encoder transmitter 30*) configured to generate binary signal (*col.3 lines 29-34 digitized trigger signal packet*) which specifies the actuated safety device (*col.3 lines 35-43 "... the packet includes... a safety device ID"*). Zaharia et al. therefore fully anticipated claim 3 (see col. 4, lines 41-45).

Regarding claim 6, this claim further defines claim 1 or claim 2, and its additional technical feature has already been disclosed in cited references above. Meanwhile, this feature has the same function in reference D1 as in the present invention, i.e., it is used for allowing merely the operator and maintenance workers to understand the displayed information so as to avoid unnecessary worry of the passengers.

Regarding claim 9, this claim further defines claim 1 or claim 2, and its additional technical feature has already been disclosed in above cited references. Meanwhile, this feature has the same function in above cited references as in the present invention.

Regarding claim 10, this claim further defines claim 9, and its additional technical feature has already been disclosed in above cited references. Meanwhile, this feature has the same function in above cited references as in the present invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 4-5 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaharia et al. (US Pat. #5,708,416) in view of Tanake et al. (JP 2002-193578). Regarding claim 4, the sole difference between this claim and Zaharia et al. is a signal interrupting means for interrupting all the signals to be delivered to the display controller, upon a detection of a malfunction of the controller. However, those skilled in the art may easily come up with the idea for interrupting all the signals to be delivered to the display controller in time upon a malfunction of the controller in order to prevent the passengers from being misguided by the incorrect display signals. Meanwhile, it is a common means and obvious for those skilled in the art that the signal interrupting means is used to interrupt all the display signals upon a detection of a malfunction of the controller.

Regarding claim 5, the further difference between this claim and claim 4 is its additional technical feature is that "the signal interrupting means sends a signal informing of an occurrence of the malfunction to a monitoring panel, simultaneously with interrupting the signals introduced to the display controller". In fact, those skilled in the art may easily and obviously come up with the idea for interrupting all the signals to be delivered to the

display controller in time upon a malfunction of the controller in order to prevent the passengers from being misguided by the incorrect display signals, and meanwhile sending a signal informing of an occurrence of the malfunction to a monitoring panel.

Regarding claim 7, this claim further defines claim 3, and its additional technical feature has already been disclosed in Tanaka et al. (referring to the abstract of the description and Figs. 1-2). Meanwhile, this feature has the same function in Tanaka et al. reference as in the present invention, i.e., it is used for storing malfunction history data. Thus it would be obvious one skilled in the art to use the idea for storing means for storing malfunction history data to the controller of Zaharia.

Regarding claim 8, this claim further defines claim 7, and its additional technical feature is that the controller has a battery as an emergency power source. However, this technical feature belongs to a common means in the art and it is obvious for those skilled in the art.

CONCLUSION

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Douglas Lee, whose telephone number is (571) 272-3745. The examiner can normally be reached on Monday-Friday from 8:00AM- 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Albert Decady*, can be reached on (571) 272-3819 or via e-mail addressed to [*Albert.Decady@uspto.gov*]. The fax number for this Group is (571) 273-8300. Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [*doug.lee@uspto.gov*].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122.

Art Unit: 2121

This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or CANADA) or 571-272-1000.

/D. S. L./

/Albert DeCady/

Supervisory Patent Examiner, Art Unit 2121